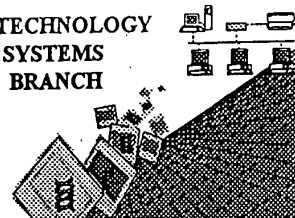


M. Wali EKA

BIOTECHNOLOGY
SYSTEMS
BRANCH



#28
29

RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/424,686D
Source: 1600
Date Processed by STIC: 3/19/03

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

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- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
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FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

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Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebs/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002



Does Not Comply
 Copyright No Needed

1600

RAW SEQUENCE LISTING

DATE: 03/19/2003

PATENT APPLICATION: US/09/424,686D

TIME: 13:04:52

Input Set : A:\PTO.VSK.txt

Output Set: N:\CRF4\03192003\I424686D.raw

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 5 Siegmund, Hans-Ulrich
 6 Weichel, Walter
 7 Wick, Maresa
 8 Zubov, Dmitry
 10 <120> TITLE OF INVENTION: Human Catalytic Telomerase Sub-Unit and its Diagnostic and
 11 Therapeutic Use
 13 <130> FILE REFERENCE: Bayer 10,203
 15 <140> CURRENT APPLICATION NUMBER: US 09/424,686D
 17 <141> CURRENT FILING DATE: 1999-11-29
 19 <150> PRIOR APPLICATION NUMBER: PCT/EP98/03468
 21 <151> PRIOR FILING DATE: 1998-06-09
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ERRORED SEQUENCES

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DATE: 03/19/2003

PATENT APPLICATION: US/09/424,686D

TIME: 13:04:52

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153 <213> ORGANISM: Homo sapiens

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E--> 155 <400> SEQUENCE: 2

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157 1 5 10 15
159 His Tyr Arg Glu Val Leu Pro Leu Ala Thr Phe Val Arg Arg Leu Gly
160 20 25 30
162 Pro Gln Gly Trp Arg Leu Val Gln Arg Gly Asp Pro Ala Ala Phe Arg
163 35 40 45

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RAW SEQUENCE LISTING

DATE: 03/19/2003

PATENT APPLICATION: US/09/424,686D

TIME: 13:04:52

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Output Set: N:\CRF4\03192003\I424686D.raw

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171   Val Ala Arg Val Leu Gln Arg Leu Cys Glu Arg Gly Ala Lys Asn Val
172       85           90           95
174   Leu Ala Phe Gly Phe Ala Leu Leu Asp Gly Ala Arg Gly Gly Pro Pro
175       100          105          110
177   Glu Ala Phe Thr Thr Ser Val Arg Ser Tyr Leu Pro Asn Thr Val Thr
178       115          120          125
180   Asp Ala Leu Arg Gly Ser Gly Ala Trp Gly Leu Leu Leu Arg Arg Val
181       130          135          140
183   Gly Asp Asp Val Leu Val His Leu Leu Ala Arg Cys Ala Leu Phe Val
184       145          150          155          160
186   Leu Val Ala Pro Ser Cys Ala Tyr Gln Val Cys Gly Pro Pro Leu Tyr
187       165          170          175
189   Gln Leu Gly Ala Ala Thr Gln Ala Arg Pro Pro Pro His Ala Ser Gly
190       180          185          190
192   Pro Arg Arg Arg Leu Gly Cys Glu Arg Ala Trp Asn His Ser Val Arg
193       195          200          205
195   Glu Ala Gly Val Pro Leu Gly Leu Pro Ala Pro Gly Ala Arg Arg Arg
196       210          215          220
198   Gly Gly Ser Ala Ser Arg Ser Leu Pro Leu Pro Lys Arg Pro Arg Arg
199       225          230          235          240
201   Gly Ala Ala Pro Glu Pro Glu Arg Thr Pro Val Gly Gln Gly Ser Trp
202       245          250          255
204   Ala His Pro Gly Arg Thr Arg Gly Pro Ser Asp Arg Gly Phe Cys Val
205       260          265          270
207   Val Ser Pro Ala Arg Pro Ala Glu Glu Ala Thr Ser Leu Glu Gly Ala
208       275          280          285
210   Leu Ser Gly Thr Arg His Ser His Pro Ser Val Gly Arg Gln His His
211       290          295          300
213   Ala Gly Pro Pro Ser Thr Ser Arg Pro Pro Arg Pro Trp Asp Thr Pro
214       305          310          315          320
216   Cys Pro Pro Val Tyr Ala Glu Thr Lys His Phe Leu Tyr Ser Ser Gly
217       325          330          335
219   Asp Lys Glu Gln Leu Arg Pro Ser Phe Leu Leu Ser Ser Leu Arg Pro
220       340          345          350
222   Ser Leu Thr Gly Ala Arg Arg Leu Val Glu Thr Ile Phe Leu Gly Ser
223       355          360          365
225   Arg Pro Trp Met Pro Gly Thr Pro Arg Arg Leu Pro Arg Leu Pro Gln
226       370          375          380
228   Arg Tyr Trp Gln Met Arg Pro Leu Phe Leu Glu Leu Leu Gly Asn His
229       385          390          395          400
231   Ala Gln Cys Pro Tyr Gly Val Leu Leu Lys Thr His Cys Pro Leu Arg
232       405          410          415
234   Ala Ala Val Thr Pro Ala Ala Gly Val Cys Ala Arg Glu Lys Pro Gln
235       420          425          430
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RAW SEQUENCE LISTING

DATE: 03/19/2003

PATENT APPLICATION: US/09/424,686D

TIME: 13:04:52

Input Set : A:\PTO.VSK.txt

Output Set: N:\CRF4\03192003\I424686D.raw

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244    465          470          475          480
246    Arg His Asn Glu Arg Arg Phe Leu Arg Asn Thr Lys Lys Phe Ile Ser
247          485          490          495
249    Leu Gly Lys His Ala Lys Leu Ser Leu Gln Glu Leu Thr Trp Lys Met
250    500          505          510
252    Ser Val Arg Asp Cys Ala Trp Leu Arg Arg Ser Pro Gly Val Gly Cys
253    515          520          525
255    Val Pro Ala Ala Glu His Arg Leu Arg Glu Glu Ile Leu Ala Lys Phe
256    530          535          540
258    Leu His Trp Leu Met Ser Val Tyr Val Val Glu Leu Leu Arg Ser Phe
259    545          550          555          560
261    Phe Tyr Val Thr Glu Thr Thr Phe Gln Lys Asn Arg Leu Phe Phe Tyr
262    565          570          575
264    Arg Lys Ser Val Trp Ser Lys Leu Gln Ser Ile Gly Ile Arg Gln His
265    580          585          590
267    Leu Lys Arg Val Gln Leu Arg Glu Leu Ser Glu Ala Glu Val Arg Gln
268    595          600          605
270    His Arg Glu Ala Arg Pro Ala Leu Leu Thr Ser Arg Leu Arg Phe Ile
271    610          615          620
273    Pro Lys Pro Asp Gly Leu Arg Pro Ile Val Asn Met Asp Tyr Val Val
274    625          630          635          640
276    Gly Ala Arg Thr Phe Arg Arg Glu Lys Arg Ala Glu Arg Leu Thr Ser
277    645          650          655
279    Arg Val Lys Ala Leu Phe Ser Val Leu Asn Tyr Glu Arg Ala Arg Arg
280    660          665          670
282    Pro Gly Leu Leu Gly Ala Ser Val Leu Gly Leu Asp Asp Ile His Arg
283    675          680          685
285    Ala Trp Arg Thr Phe Val Leu Arg Val Arg Ala Gln Asp Pro Pro Pro
286    690          695          700
288    Glu Leu Tyr Phe Val Lys Val Asp Val Thr Gly Ala Tyr Asp Thr Ile
289    705          710          715          720
291    Pro Gln Asp Arg Leu Thr Glu Val Ile Ala Ser Ile Ile Lys Pro Gln
292    725          730          735
294    Asn Thr Tyr Cys Val Arg Arg Tyr Ala Val Val Gln Lys Ala Ala His
295    740          745          750
297    Gly His Val Arg Lys Ala Phe Lys Ser His Val Ser Thr Leu Thr Asp
298    755          760          765
300    Leu Gln Pro Tyr Met Arg Gln Phe Val Ala His Leu Gln Glu Thr Ser
301    770          775          780
303    Pro Leu Arg Asp Ala Val Ile Glu Gln Ser Ser Ser Leu Asn Glu
304    785          790          795          800
306    Ala Ser Ser Gly Leu Phe Asp Val Phe Leu Arg Phe Met Cys His His
307    805          810          815
309    Ala Val Arg Ile Arg Gly Lys Ser Tyr Val Gln Cys Gln Gly Ile Pro
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RAW SEQUENCE LISTING

DATE: 03/19/2003

PATENT APPLICATION: US/09/424,686D

TIME: 13:04:52

Input Set : A:\PTO.VSK.txt

Output Set: N:\CRF4\03192003\I424686D.raw

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318      Arg Leu Val Asp Asp Phe Leu Leu Val Thr Pro His Leu Thr His Ala
319      865                      870                      875                      880
321      Lys Thr Phe Leu Arg Thr Leu Val Arg Gly Val Pro Glu Tyr Gly Cys
322              885                      890                      895
324      Val Val Asn Leu Arg Lys Thr Val Val Asn Phe Pro Val Glu Asp Glu
325              900                      905                      910
327      Ala Leu Gly Gly Thr Ala Phe Val Gln Met Pro Ala His Gly Leu Phe
328              915                      920                      925
330      Pro Trp Cys Gly Leu Leu Leu Asp Thr Arg Thr Leu Glu Val Gln Ser
331              930                      935                      940
333      Asp Tyr Ser Ser Tyr Ala Arg Thr Ser Ile Arg Ala Ser Leu Thr Phe
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336      Asn Arg Gly Phe Lys Ala Gly Arg Asn Met Arg Arg Lys Leu Phe Gly
337              965                      970                      975
339      Val Leu Arg Leu Lys Cys His Ser Leu Phe Leu Asp Leu Gln Val Asn
340              980                      985                      990
342      Ser Leu Gln Thr Val Cys Thr Asn Ile Tyr Lys Ile Leu Leu Leu Gln
343              995                      1000                      1005
345      Ala Tyr Arg Phe His Ala Cys Val Leu Gln Leu Pro Phe His Gln Gln
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348      Val Trp Lys Asn Pro Thr Phe Phe Leu Arg Val Ile Ser Asp Thr Ala
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351      Ser Leu Cys Tyr Ser Ile Leu Lys Ala Lys Asn Ala Gly Met Ser Leu
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355              1060                      1065                      1070
357      Leu Cys His Gln Ala Phe Leu Leu Lys Leu Thr Arg His Arg Val Thr
358              1075                      1080                      1085
360      Tyr Val Pro Leu Leu Gly Ser Leu Arg Thr Ala Gln Thr Gln Leu Ser
361              1090                      1095                      1100
363      Arg Lys Leu Pro Gly Thr Thr Leu Thr Ala Leu Glu Ala Ala Ala Asn
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1276 <220> FEATURE:

W--> 1277 <221> NAME/KEY: Substitution

1278 <222> LOCATION: (1)..(4012)

1279 <223> OTHER INFORMATION: Nucleotide positions 1-3220 are identical with the same positions in

1280 SEQ ID NO: 1. Nucleotide positions 3819 to 4012 are identical to

1281 positions 3449 to 4042 in SEQ ID NO: 1.

found only 3470 in Seq. 1

RAW SEQUENCE LISTING

DATE: 03/19/2003

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TIME: 13:04:52

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1328 tcaggggcaa gtcctacgtc cagtgcagg ggatccgca gggctccatc ctctccacgc 2580
1329 tgctctgcag cctgtgttac ggcgacatgg agaacaagct gtttgcgggg attcggcggg 2640
1330 acgggctgct cctgcgtttg gtggatgatt tctgtgtggt gacacctcac ctacccacg 2700
1331 cgaaaacctt cctcaggacc ctggctcgag gtgtccctga gtatggctgc gtggtgaact 2760
1332 tgcggaagac agtgggaac ttccctgtag aagacgaggc cctgggtggc acggcttttg 2820
1333 ttcagatgcc ggcccacggc ctattcccct ggtgcggcct gctgctggat acccgacc 2880

```

RAW SEQUENCE LISTING

DATE: 03/19/2003

PATENT APPLICATION: US/09/424,686D

TIME: 13:04:52

Input Set : A:\PTO.VSK.txt

Output Set: N:\CRF4\03192003\I424686D.raw

```

1334 tggaggtgca gagcgactac tccagctatg cccggacctc catcagagcc agtctcacct 2940
1335 tcaaccgcgg cttcaaggct gggaggaaca tgcgtcgcaa actctttggg gtcttgccgc 3000
1336 tgaagtgtca cagcctgttt ctggatttgc aggtgaacag cctccagacg gtgtgcacca 3060
1337 acatctacaa gatcctcctg ctgcaggcgt acaggtttca cgcatgtgtg ctgcagctcc 3120
1338 catttcatca gcaagtttgg aagaacccca catttttctt gcgcgtcatc tctgacacgg 3180
1339 cctccctctg ctactccatc ctgaaagcca agaacgcagg tatgtgcagg tgcctggcct 3240
1340 cagtggcagc agtgcctgcc tgctggtgtt agtgtgtcag gagactgagt gaatctgggc 3300
1341 ttaggaagtt cttaccctt ttcgcatcag gaagtggttt aacccaacca ctgtcaggct 3360
1342 cgtctggcgc ccctctcgtg gggtgagcag agcacctgat ggaagggaca ggagctgtct 3420
1343 gggagctgcc atccttccca ccttgcctg cctggggaag cgctgggggg cctggtctct 3480
1344 cctgtttgcc ccatggtggg atttgggggg cctggcctct cctgtttgcc ctgtggtggg 3540
1345 attgggctgt ctcccgtcca tggcacttag ggcccttggt caaacccagg ccaagggctt 3600
1346 aggaggagcc caggcccagg ctaccccaacc cctctcagga gcagaggccg cgtatcacca 3660
1347 cgacagagcc ccgcgccgtc ctctgcttcc cagtaccgt cctctgcccc tggacacttt 3720
1348 gtccagcatc agggaggttt ctgatccgtc tgaaattcaa gccatgtcga acctgcggtc 3780
1349 ctgagcttaa cagcttctac tttctgttct ttctgtgttg tggagaccct gagaaggacc 3840
1350 ctgggagctc tgggaatttg gagtgaacaa aggtgtgccc tgtacacagg cgaggaccct 3900
1351 gcacctggat gggggtccct gtgggtcaaa ttggggggag gtgctgtggg agtaaaatac 3960
1352 tgaatatatg agtttttcag ttttgaaaaa aaaaaaaaaa aaaaaaaaaa aa 4012

```

E--> 1357 (25)
E--> 1361 (25) - delete

VERIFICATION SUMMARY

DATE: 03/19/2003

PATENT APPLICATION: US/09/424,686D

TIME: 13:04:53

Input Set : A:\PTO.VSK.txt

Output Set: N:\CRF4\03192003\I424686D.raw

L:147 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:3470 SEQ:1
L:147 M:252 E: No. of Seq. differs, <211> LENGTH:Input:4042 Found:3470 SEQ:1
L:155 M:282 E: Numeric Field Identifier Missing, <210> is required.
L:155 M:212 E: (34) Invalid or duplicate Sequence ID Number, SEQUENCE ID NOS:1 differs:2
L:369 M:214 E: (33) Seq.# missing, SEQ ID NO:2
L:706 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:8
L:852 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:9
L:1000 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:10
L:1148 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:11
L:1277 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:12
L:1357 M:254 E: No. of Bases conflict, this line has no nucleotides.
M:254 Repeated in SeqNo=12
L:1361 M:252 E: No. of Seq. differs, <211> LENGTH:Input:4042 Found:4012 SEQ:12
L:23 M:203 E: No. of Seq. differs, <160> Number Of Sequences:Input (7) Counted (12)